



$$V = lwh$$

Current = 95% old  
volume = volume

$$319.2 = .95(x)(x+2)(14)$$

$$31920 = 95(14x)(x+2)$$

$$31920 = 1330x(x+2)$$

$$31920 = 1330x^2 + 2660x$$

$$24 = x^2 + 2x$$

$$x^2 + 2x - 24 = 0$$

$$(x+6)(x-4) = 0$$

$$x = -6 \quad x = 4$$

$$4 \cdot 6 \cdot 14 = 336 \cdot .95 = 319.2$$

let  $x = \text{height (in)}$   
 $x+2 = \text{width (in)}$   
 $14 = \text{length}$

height = 4  
width = 6  
length = 14

$$9m^2 - 20m - 21 = 0$$

$$9m^2 - 21 = 20m$$

$$9m^2 - 20m = 21$$

$$m^2 - \frac{20}{9}m + \frac{100}{81} = \frac{21}{9} \pm \frac{189}{81} + \frac{100}{81}$$

$$\left(\frac{20}{18}\right)^2 = \left(\frac{10}{9}\right)^2$$

$$\left(m - \frac{10}{9}\right)^2 = \frac{289}{81}$$

$$\left\{3, -\frac{7}{9}\right\}$$

$$m - \frac{10}{9} = \pm \frac{17}{9}$$

$$m = \frac{10}{9} \pm \frac{17}{9}$$

33